partment to the ryots. As the Agricultural Department has to do propaganda work to give instructions to the ryots, it was thought that the officers of that department could utilise the agency of Panchayatdars for the purpose, as these bodies have to come in contact with the ryots. It was with this object in view that the Panchayat and Agricultural Departments were clubbed together. Since it is represented that the clubbing had given no benefit to the Panchayats, Government are prepared to look into the matter, and take all the representations now made into consideration and arrive at some satisfactory conclusion.

On the assurance given by the Diwan Peishkar, Mr. Salem did not press his motion. The motion was therefore, by leave, withdrawn.

President.—As the lunch time is nearing, we will adjourn the remaining motions to Monday. After three o'clock, we will take up the resolutions standing in the name of Mr. M. K. Raman and Mr. Rama Ayyar. We will now rise.

Mr. C. ACHYUTA MENON (*Mulakunnattukavu*).

We have received the programme till Thursday.

President.—Then we will know what amount of business we are able to get through by that time. After consulting the convenience of the Hon'ble Members, I may have to close the session or adjourn it after one or two days more. Next Monday we will be able to know something about it.

After lunch the Council reassembled at 3 p.m.

Resolutions on matters of General Public Interest.

President.—We shall now proceed with the resolution standing in the name of Mr. M. K. Raman:—

"*This Council is of opinion that the present scheme of introducing meters for the water pipes leading into private houses in Ernakulam Town is highly detrimental to the economic as well as sanitary conditions of the inhabitants of the town, and it strongly recommends to our Government for the immediate withdrawal of the same*".

Mr. M. K. RAMAN (*Eshuva South*).

Sir,

Before proceeding, I should like to explain the situation to the House, so that the Hon'ble Members from

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the Mofussil parts may be in a better position to understand our difficulty. Sir, before the introduction of the pipe-water system in Ernakulam Town, the state of this town was, I should say, miserable in point of health. People coming from outside used to be dreadfully afraid of stopping at Ernakulam or to touch the water. I know several instances where persons used to come and go back, without even touching the water here. In those days, we used to see large numbers of people passing through roads with big legs. Elephantasis and other diseases were quite common at Ernakulam. Now, probably after the introduction of the pipe system, we have been able to send one cosignment of elephantasis to its original home, Shertallay and another one, probably, to Mattancheri. So, in the course of these nine years during which period of time the pipe system has been working, we have made considerable progress so far as the health and sanitary condition of the town is concerned. I have heard this view expressed by various medical authorities as well. When I think of this pipe-water system in Ernakulam, I am always reminded of the story of Bhagiratha. His ancestors were in the hell undergoing all sorts of torture, and the only salvation for them was the introduction of Divine Ganga. Now, in fact, if anywhere in this world such a state of affairs really existed, I believe it was nine years before in Ernakulam; and I am inclined to think it is really Ganga water which is brought down to Ernakulam from the Heavens of our Olympian heights of Chowwara, after considerable trouble.

Now, the enjoyments of this fresh water, our Government are not going to permit us freely. Till now, we were getting this water, fortunately, in sufficient quantities. The Government want to introduce a system of metering all the water pipes leading to private houses. I bring to your notice the reason that is assigned by the Government in trying to introduce this new system. They say that the inhabitants of the town are wasting a good deal of water.

In this connection, it may be very interesting for you to hear of the total amount of water pumped into Ernakulam every year. I have got some of the figures here. I understand, last year 12,38,28,000 gal-

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lons of water were pumped into Ernakulam Town. That, according to the calculation, will come to only 15 gallons per day. That is to say, the inhabitants of Ernakulam are getting 15 gallons per head per day. I believe that my calculation is correct. I am a very bad mathematician. Yet, I think that this figure is correct. Now, this is the quantity which the Government think to be superfluous.

In this connection, again, it may be interesting for you to understand what the rate of water consumption is in other places where there are similar pipe-water systems. In Madras the average consumption comes to 28 gallons per head per day, which is much more than ours, ours being only 15.

In Bombay	it is	37	Gallons
,, Calcutta	,,	62	,,
,, Tokio	,,	32	,,
,, London	,,	43	,,
,, Manchester	,,	36	,,
,, Berlin	,,	35	,,
,, Madrid	,,	84	,,

If we turn to America, we find that they consume a larger quantity. In Chicago it is 252 per head per day, in Lamery 352.

President.—Where is that place? It is not a well-known name.

Mr. M. K. RAMAN (*Ezhuva South*).

I myself do not know where it is. I know only that it is in America. These figures are taken from Local Government Gazettes.

So you will understand now that the water consumed by our people is not at all excessive. In fact, it is the lowest of the recorded water consumption. What quantity of water will be necessary for a healthy man for one day, I believe, our Hon'ble Member for Medicine on the other side will be able to tell us. I do not know whether that member would be able to enlighten me on that point just now.

President.—How much is required for a day per head?

Mr. M. K. RAMAN (*Ezhuva South*).

One Doctor's opinion here was that 25 gallons would be required.

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President.—We are managing with 15 gallons. Many members said:—" No, Sir ".

Mr. C. ACHYUTA MENON (*Mulakunnattukavu*).

Because a large number of persons are not using the Alwaye water.

Mr. M. KRISHNA MENON (*Vyttila*).

This 15 gallons is calculated upon the total population out of which a major portion are not using pipe-water now.

DIWAN BAHADUR Dr. V. VERGHESE (*Chief Medical and Sanitary Officer*).

The calculation is not correct. It excludes the consumption of pipe-water in the suburbs. The whole population do not receive the benefit of water pipes. On an average, 15 gallons is quite a decent allowance for each man per day.

Mr. M. KRISHNA MENON (*Vyttila*).

I am correct in stating that they do not use water, for they do not get a sufficient quantity of water. Almost all neighbours who are remaining in the back compound come to the front compound by the charity of the house-owner and are taking water for consumption.

President.—Why can't they take water from the public taps?

Mr. M. KRISHNA MENON (*Vyttila*).

Those who have to go far to get water do not go.

Mr. M. K. RAMAN (*Ezhuva South*).

Sir, mine is only an approximate calculation, not absolutely correct. But it is not, at the same time, far from correct. Again, my calculation is based on the assumption that the whole of the water pumped into the town is used by the town people, which is not true, as will be seen presently, since water is taken to the Tata Mills and other commercial firms out of this total quantity. So, the average ought to be less than 15. But all people in the town, as the Hon'ble Members pointed out are not getting the full benefit of the pipe water. Hence it is that I said that, approximately, 15 gallons per head per day would be a correct calculation.

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Sir, I submit that water-cess is collected from all the people of Ernakulam whether there is a pipe-connection or not to their houses. The average consumption of water, as I have already pointed out, is 15 gallons per head per day, and this calculation is arrived at, I may say again, on the assumption that the whole pipe-water is utilised by the inhabitants of Ernakulam. Besides these, we have a number of public hydrants in the main roads. From these public hydrants, water is taken to the suburbs also. It is taken even to the neighbouring villages, 5 and 6 miles away from the town. No tax is collected from them. And there is no check placed upon the water taken to the Mofussil parts. It should not for a moment be supposed that I grudge the Mofussil people using Alwaye water. Far from it. But only for the purpose of showing that the townspeople are not consuming the excess, I make mention of the fact also. In addition to this, I may say that the water supplied to the Railway Company, the Tata Oil Mills, Ltd., the Standard Oil Company and all other commercial firms from the main pipes, is given to them at a concession rate of 12 as. per 1,000 gallons, whereas our own inhabitants have to pay at the rate of 2 rupees for 1,000 gallons of water. No concession is shown to us.

President.—12 as. per 1,000 gallons?

Mr. V. K. ARAVINDAKSHA MENON (*Chief Engineer*)

12 as.— only for the Tatas.

Mr. A. B. SALEM (*Jews*).

I rise to a point of order. No question shall be put on a resolution unless it has been seconded.

President.—Errors have to be corrected. It is not a case of questioning. It is only giving of information. I rule that such information can be supplied.

Mr. V. K. ARAVINDAKSHA MENON (*Chief Engineer*).

For the Tata Oil Mills alone, the concession is allowed. For the Railway and other companies, like private individuals, water is supplied. Everywhere we charge Rs. 2 per 1,000 gallons.

Mr. M. K. RAMAN (*Ezhuva South*).

In additon to the water supplied to these commercial firms, water is also supplied to all the public

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institutions such as Hospitals, Hostels, the College, and all the public institutions. That water is also included in the total quantity of the consumption. So, clearly, it will be a little less than 15 gallons. Now, Sir, I suppose it will be very clear that the quantity that is consumed by the town inhabitants is not in any way excessive. I do not know whether the Government expect our people to be less clean than people in Madras. Probably, our people want much more water than people in Madras and other places; for Kerala is famous for its cleanliness. The assumption, therefore, that too much water is used by the town people is not true, and hence there is no necessity for having any sort of check upon the use of water. It may be that a few individuals are using large quantities of water, but, then, it will be a hard thing, in order to check those people, to inflict on all of us a sort of punishment by introducing meter into each and every pipe. That would be a general punishment. Now, if the authorities suspect any misuse of water, let them put meters in those places, where it is suspected, and find out whether there is any excess and charge those particular individuals.

President.—Have the authorities in the towns mentioned by you introduced the metering system?

Mr. M. K. RAMAN (*Ezhuva South*).

The same difficulty of excess use of water must have been felt by other Municipalities also, and I have got here a statement showing the number of pipes that are metered and those unmetered. In Chidambaram there are, on the whole, 47 pipes—that is the total—of which 20 are metered and 27 are unmetered.

President.—What sort of pipes are metered in those towns?

Mr. M. K. RAMAN (*Ezhuva South*).

Pipes leading into hostels where they suspect a large consumption of water, mills, houses with gardens, &c.

Statement showing the number of pipes metered and unmetered in towns and their names.

Name	Total	No. Metered	No. Unmetered
Coconada	763	307	456
Conjeevaram	679	86	593

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Coonoor	370	59	314
Cudappah	357	35	322
Kudiyattam, a Railway station in the Salem District. 8 pipes and nearly all unmetered.			
Kodaikanal	53	41	12
Curnool	603	48	555
Madura	1,668	432	1,186
Nellore	410	57	343
Ooty	694	177	517
Tanjore	798	156	642
Tirupati	380	20	360
Trichinopoly	14,04	486	918
Madras	3,100	2,000	1,100
Bombay	28,701	1,900	26,801

This statement would show that the system of all-round metering is not attmpted in any place. Meter is only introduced in places where excess is suspected. Then, again, if this metering is introduced, there are practical difficulties. It is a well-known truth that no two watches agree. Much less will they read correctly. Meters can never be more delicate instruments than watches. Perhaps, in one and the same pipe, a number of meters will have to be introduced, and an average reading will have to be taken. So much so, additional staff will have to be appointed, which means an additional expenditure from the Government. Now, in this free country—nay, I would say—in this charitable country, where some people are sumptuously fed with *palpayasam* and *pappatam* and a *dakshina* also given in the end, I ask: why should not the people be given at least Alwaye water to drink in profuse quantity, as a matter of charity? I have already pointed out that, of all the recorded accounts, the 15 gallons of our consumption is the lowest. In fact, there is no other place, which I could find out in my search, where the consumption per head per day is lower.

I submit to this House to take a sympathetic consideration of the matter and oppose unanimously this pernicious all-round metering system. I may say that the Hon'ble Members coming from Mofussils need not be under the impression that Ernakulam is a sanitorium, and that we are having too much of enjoyment. This is the capital of the State. The head does not exist for itself. The body cannot exist without the head.

We are paying as much tax by way of assessment as any other member from the Mofussil. In addition

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to that I may also point out to you that our Municipality is collecting Rs. 50,000 every year from us as Municipal tax. Upon calculation, it comes to the rate of Rs. 12—8—0 to every house in Ernakulam. Over and above the general tax, therefore, we are paying for every house an additional tax of Rs. 12—8—0.

The Government was hitherto maintaining all the public roads of this town, and, on that account, they had to incur an annual expenditure of Rs. 20,000. Now, that expenditure is met by the Municipality, and all these roads are maintained by it. The Government are not spending anything. I think there will be no additional expenditure necessary to be incurred by the Government on account of the water system. I would submit to this House that even if the Government have to incur such additional expenditure, they should utilise the money they were spending hitherto for the upkeep of the town roads and meet the requirements.

According to the Municipal Regulation, the water system ought to be entirely left in the hands of the Municipality. In fact, now the Municipality is only collecting the water-cess. But the Government also have a sort of control over the Water-works. It seems to be under a sort of dual control. Neither the Government nor the Municipality seems to be responsible for the state of affairs. I understand that the Municipality approached the Government and requested that the whole Water-works may be entrusted with them. They addressed the Government that they would manage the Water-works without asking for any financial aid from the Government. The Government should have very well done that. But they would not let the Water-works go out of their hands. Sir, my time seems to be over. I would, therefore, conclude with the request to this House that my resolution may be warmly supported, in view of the fact that water is an absolute necessity, and no tax and restriction should be imposed on the use of it.

Mr. V. K. KOCHUNNI MENON (*Ernakulam*).

Sir,

I beg to second the resolution. In doing so, I do not wish to take up much of the time of the House. The introduction of the meter will cost the people of

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the State a pretty large sum as initial expense; and further, it will be a source of annoyance to the people, in addition to the payments that they may have to make for the water that they may take in excess of the quantity allowed them, which will be based upon the house-rent paid. This is sure to affect the poor more than the well-to-do. To have recourse, therefore, to such a system of general metering, there must be sufficient justification.

The idea of metering appears to have been suggested to the Government on account of the large waste of water supposed to have been committed in private houses. This presumption cannot be accepted unless it is borne out clearly and conclusively by facts. Until we know what is the quantity of water drawn from the hydrants in public roads and used by such public places as hostels, hotels, etc., we cannot ascertain as to where exactly the waste is committed, whether in these public places or in private houses. The water used in the latter is for home consumption, while that used in the former results in gain.

Thus, there is sufficient justification for metering only these public places. I, therefore, agree with the mover that sufficient case has not been made out for general metering.

SY. T. MADHAVI AMMA (*Nominated*).

Allow me, Sir, on behalf of members of my sex, whom I represent here, to convey their humble and heartfelt thanks to His Highness the Maharaja and His Highness' Government for having given them this opportunity to express their sentiments of gratitude and devotion from a place like this Council. I hope my colleagues here will view this particular case with more leniency when they come to understand that this is not a reform imported from Travancore and British India, where, I am afraid to state here, not even a single seat has yet been allowed for us in the name of our sex in similar Councils, but I, for my part, am proud to say that I, who represent the major portion of the population of Cochin without distinction of caste or creed, do stand for Cochin itself and Her needs, and once more express our grateful thanks to the Ruler of this State for introducing this piece of high reform when other countries cry for it. So much for that.

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Now, to the point of business, I support, Sir, this resolution.

The introduction of the pipe-water system by the Government here at Ernakulam first, instead of at Trichur, where water scarcity is more keenly felt, is due mainly to the unhealthy and unacceptable condition of water we have here; and after having got this boon, we all naturally thought there would be no more need for tanks, and consequently, almost all of them are levelled up, and the limited number we see here and there are not in a proper condition for use. So, if the meters are applied to the pipes now, and if the water supply will have to be limited owing to the taxation levied on the surplus quantity of water needed, it would cause a great deal of difficulty and inconvenience, especially, to womenfolk of this place, by taking out the facility of having enough quantity of fresh water for their daiiy use from inside their houses, and pressing them (of course, indirectly) to seek redress from the pipes erected on the *Public Roads*. I say this, because when water will have to be purchased for money, especially when it has become so dear now-a-days, the quantity of consumption of water in all private houses—poor peoples' houses in particular—will have to be minimised. The result will be that they will have either to go to their old system of keeping tanks, which has been found to be disastrous already, or to go to the public roads, which is undesirable. Therefore, I strongly support this resolution.

Mr. S. F. NUNEZ (*Anglo-Indians*)

Sir, I rise to support this resolution. I agree with the Hon'ble Mover in protesting vehemently against the introduction of the general system of metering, in the rising town of Ernakulam. Of course, I do not agree with all the arguments he has raised in support of his resolution. If we force the introduction of a general system of metering into the town, that would entail additional expenditure and, therefore, an additional establishment.

I oppose metering on purely financial, economic and sanitary grounds. If we introduce a general system of metering into the town, I say that we defeat

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the purpose of having gone in for Alwaye water. It would certainly affect the health of this town, and any consideration which would stand in the way of the health of the inhabitants of this city should be given its due weight. Water is one of the primary assets of our State, of humanity in general.

Well, the Hon'ble Member for Medicine told us a few minutes ago that the calculation of the consumption of water as 15 gallons does not include the consumption by people living in the suburbs. I do not think that is an argument in favour of the general system of introducing meter. It goes against the intention of the Government in bringing Alwaye water to Ernakulam. I shall convince you of this. Now, the average is from the total quantity of water consumed in the town. If the outlying parts of the town do not enjoy the blessings of this Alwaye water, I say the amount required in laying out a general system of metering may well be spent in establishing a few extra hydrants in these outlying parts. That is, of course, Ernakulam's immediate necessity.

The Hon'ble Mover pointed out that the consumption of water in other towns, like Madras, Bombay and Calcutta, is certainly far higher than the average consumption in Ernakulam. That itself is convincing proof that no water is wasted. If there is any argument in favour of the general system of metering, that only argument is waste of water. Here, the facts reveal the deplorable condition that water, instead of being wasted, is not sufficiently consumed. I do not say that they are not using water, but they do not use Alwaye water. If you take the population as a whole, the average quantity of water consumed is very little.

As to the money, it should, of course, be utilised in this town in bringing the Alwaye water within the reach of the people by putting up a few hydrants in those places where there is scarcity of water, preference being given to the localities inhabited by the poor.

The Hon'ble the mover also referred to certain towns in America. Of these, one is Chicago, a town of vast extent with immense population, with immense possiblities before it, a town of recent times, and laid

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out on the most sanitary principles. In this town,even a street boy may have the enjoyment of free air. So also the quantity of their water supply, which comes to an average of 25 gallons per head per day. Here, in this part of the world, we are allowed an insignificant and unhealthy quantity of 15 gallons.

Well, that is the situation which one has to take into consideration. I do not deny that a few pipes may be metered in certain parts of the town, in public places, when there might be no proper control over the use of water, so that no waste may occur.

As to me, it does not matter whether it is municipal or departmental, because the House is not a local concern. Whether in the Mechanical Department or in the Municipality, we want only to take away the system of introducing meters.

India is noted for its cleanliness. Even in historic ages, you will find that India had a reputation for cleanliness. In our Sastras and in our moral injunctions, it is laid down clearly that people should be sacred and clean. Cleanliness is next to godliness. I do not think the House is going to deny that. If we are allowed only 15 gallons, it would not be sufficient for us, for our daily necessities. By introducing meter, we limit, to the people of this town, one of the elementary necessities, and it would, after all, fetch only a very small income to the Government. I most respectfully request the Hon'ble Members of this House to support this resolution.

Mr. A. B. SALEM (*Jews*).

As a citizen of Ernakulam, I rise to oppose the metering system that is being compulsorily forced upon us by the P. W. D., in spite of the protest of our City Fathers in Councils.

President.—Are you supporting the resolution?

Mr. A. B. SALEM (*Jews*).

Certainly. (*Laughter.*) It was in view of this motion coming before this House that I took the opportunity of giving the Government Department concerned the chance of letting in certain information

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before this House. I had sent in a number of questions regarding this matter as early as the 26th of June 1925, that is, one month before we assembled here, so that they may give us what we wanted, in time for this discussion. But, unfortunately, that information has not yet arrived. The questions that I sent will be very pertinent for this discussion. It was to ask the Government whether they had made any arrangement for an alternative pumping plant in the Water-works. There is only one set of machinery for pumping water, and if anything went wrong with it, the whole town will be without water for some time to come.

My only point now is against the introduction of meters. As early as 1912, Mr. Mody investigated the supply of water here and laid down that 15 gallons of water would be sufficient for our purposes, and nobody complained of the actual quantity that was allowed. We all had sufficient water as we wanted from the service-connections. We have been using it. Our womenfolk would be put to a great deal of trouble, if they are restricted in the use of water, since all the tanks and wells in the towns have been levelled up. Air and water are the prime necessities of life. As for the air, nobody has come forward to lay a charge upon that. (*Laughter.*) And I should say, there is no reason why the Government, which has supplied water, should come forward to say that water shall be taxed.

President.—Is it your point that water should not be taxed at all, and that it should be given free?

Mr. A. B. SALEM (*Jews*).

These are the few things that must be given free. Air is free, water is free, wells have been free, everything has been free in nature.

Mr. S. F. NUNEZ (*Anglo-Indians*).

Sir, that is Bolsheivism.

Mr. A. B. SALEM (*Jews*).

Then, we are all Bolsheivists. That would be an interruption and not an information. Water is free. We have been face to face with the cost of bringing it here from a distance from Alwaye—and we willingly submitted to taxation along with the house-tax.

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The result of introducing this metering is primarily to check the use and not the wastage, because the poor people can hardly find money to buy pipes. If they are asked to buy meters also, for 60 or 70 rupees, they will say that they will go without Alwaye water than buy the meter. They will begin to sink a large number of tanks and wells, and the Sanitary and Medical Departments will be put to great trouble by a large number of patients. A greater amount will have to be budgetted for the Medical Department. They will have to pay more for doctors if they use bad water. Therefore, Sir, I submit to the House that abundant, free supply of water must be the sure policy of both the Government and the Municipality.

The Municipality is against introducing meters. The Water-works has been a free gift by the charitable Government to the town, and there was no reason why on earth the P. W. D. had come in quietly and taken away the Water-works out of Municipal hands for making money and harassing citizens. We, in the Council, have been pressing upon the Government that we are prepared to handle the water scheme, except the capital expenditure, if they are prepared to hand it over to us. The Government now comes in and takes away the Water-works from the Municipality and hands it over to the P. W. D. This metering amounts to a penalty upon the people, if it will not form a check on the waste. The Municipality is not for metering. If that body is not for it, it is not for the P. W. D. to say that meter should be introduced. It should not be the policy of Government to go against the wishes of the people.

With these words, I support the resolution with my whole heart, and I appeal to the House and to the members, who have come from the other parts of the country to this town—where they enjoy this good water—to support this resolution.

Mr. M. KRISHNA MENON (*Vyttila*)

Sir, I rise to support this resolution. For the last few days, we have been supporting the Hon'ble Member for Land Revenue who wants to make money by Selling every bit of *poramboke* land. We have been supporting the Superintendent of Excise Revenue for making

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money for the Government by the sale of toddy. To-day we have to oppose the Hon'ble Member for D. P. W. who wants to make money by selling water.

The statistics put forward by the Hon'ble Mover is not quite correct. It is far below. Every one of us could see, on almost every day, and during night, the people living outside the Municipality carrying water from the hydrants. You can find boatmen from Cochin, taking water in boat-loads every day, from the public hydrants, day and night, for the consumption of the people living in Cochin. I think it is from the quantity calculated that the Railway Company as well as the Tata Oil Mills, Ltd., are being supplied with water. I think these people consume a large amount of water. Since those quantities are not taken into consideration by the Hon ble Mover, his calculation cannot be correct, and I say, it is far below 15 gallons.

Mr. M. K. RAMAN (*Ezhuva South*).

I said only, assuming that the whole water is consumed by the townspeople, it comes to 15 gallons.

Mr. M. KRISHNA MENON (*Vyttila*).

I put forward before this House that, if every house-connection is metered, the result will be, if any guest arrives, we will have to ask him to go outside and bathe, or after his bath, we shall have to make him pay. This is too hard.

President.—Why not ask him to bathe and pay?

Mr. M. KRISHNA MENON (*Vyttila*).

There are places where peoples are invited not only for bath but also for meals, and I have no objection to meter those houses That will be wise, and I think they are all metered even now. When the pipe system was introduced, the house-connections had to be done by the house-owners, and since the cost of pipes was very high, only the rich men were able to do that. The middle classes also were able to go in for them. The poor did not go in for house-connections at that time. When the price of pipes went down, and when the poor men thought of having house-connections, the meter came in and house-connections could be had, only if they are metered. The

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order is to include the cost of the meter in the estimate for all house-connections.

In the whole of Ernakulam Town, within two roads, there is a big block inside. It is being cut open only now. The people living there, even the middle classes among them, had to go without water, for, if they require water, they had to go to the public hydrants. It is a hard thing for a woman to go to the public road and bathe under the public hydrant, even if she is very poor. People, going by the morning train, can see many women bathing under the public hydrants. At morning, you can see water standing in poois round the public hydrants. This is water used for bathing purposes by the poor women. That is the state of affairs that we are labouring under.

Close to the Railway Station, there is a Mody bath, where all can have a bath for 3 pies, and many avail themselves of its convenience; and for the upkeep of that building, it is auctioned by the Municipality. The amount goes higher and higher every year. In Ernakulam, we have water everywhere, and we have the back-water even, and with all that, many go to the Mody bath and have a bath for 3 pies. By not having house-connections, we are driving our poor womenfolk to public hydrants. We deny them service-connections, if they cannot afford to pay for the meter.

If meter is to be introduced in all house-connections, we have to send Rs. 50,000 to the foreign market. If the Chief Engineer can supply us meters of their own making, at least a local industry would be supported.

After introducing all their meters, what is the collection after all? If there is any *Talikettu Kalyanam* or some other big function, the D. P. W. gets 10 as. or 12 as. from the houses that have been metered. In some months they do not get even this, for the above functionsare not of daily occurrence. During the rainy season, they do not get a single pie as excess. And this excess is what the Government now wants to stop.

Womenfolk require a good deal of water, and especially, during delivery times, for the doctor will say they must be very clean. It is this difficulty

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that the Ernakulam people are labouring under, and they are forced to have meters for their house-connections.

As for the Hon'ble Members who have come from the Mofussil, they will have to pay for bathing next time.

Pipes are introduced into all Government houses like the College, Hostels, Hospitals, Government offices, Palaces, free, and absolutely there is no means to check the excess from the above places. If the Government keep the institutions for gain, all their connections also should be metered.

By this meter system, it is not the rich man that will suffer, because he has got a good house and few members. The house-tax is large, and so he would get ample water. As for the poor, the house-tax is only very small, and he will have a large number of people in his home, and the allowance of water depends upon the house-tax. If he takes any quantity in excess of this, he will have to pay. With these few words, I request the Hon'ble Members to give their support to this resolution.

Mr. K. S. RAMA AYYAR (*Trippunittura*).

Sir, There seems to be something very wrong with the idea of metering the house-connections in the water supply system of Ernakulam. When anything is proposed to be done, it must be carefully considered whether it is absolutely necessary to do it; the more so, when it will cause inconvenience or annoyance to others. Now, an all-round metering of house-connections is proposed. I ask: where is the necessity for it? On an examination of the facts and figures in connection with the water system of Ernakulam, one can very easily find that there is no necessity *now* for any such restriction. The facts and figures supplied by the previous speakers, I believe, will be sufficient proof to show that there is no necessity to introduce this measure, here, at present. There is enough water at the Head Works, and there is no room for any anxiety over this matter. The average consumption is not high; comparatively speaking, it is much lower than in several cities. And there is not much wastage.

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Looking at conditions in Madras, the capital of our Presidency, the supply is from a tank where water is stored for distribution. There the stock sometimes becomes poor, sometimes it gets spoiled. In some seasons, the Red Hills cause the citizens much anxiety, and give the Corporation much trouble. In such a place, of course, the consumption must carefully be watched and restricted.

But these conditions are absent here. Curiously enough, in this town where the people are all Malabaris, who are notorious bathers, bathing twice and thrice in a day, the average consumption is found to be low. I think it will even be found that it is lower than in Madras, where even now there are people who are afraid of water, and would be drowned if they slip into three feet of water.

It cannot be proved that there is wastage. Why, then, should such a measure be forced now to restrict the expenditure of water in this small place? Let the town grow; let it become more populous; let it become richer; let all sorts of conditions obtaining in large towns come in; and then the authorities may think of such things.

Then, there seems to be much opposition. And the opposition is reasonable, quite reasonable; and it comes from a place full of Vakils and medical men and other sorts of educated men, who know what they do elsewhere and can judge things with sense. They say that there is at present no necessity for such a restriction, and, as each house-holder has to invest between 50 and 100 rupees for the installation of the meters, they say that, as the necessity is not proved, the imposition of the meter now is unjustifiable. I, therefore, think that the Government must wait, and I support the motion.

Mr. O. R. CHUMMAR (*Vellarappalli*).

Sir,

I support the resolution. The object of metering water-connections, I understand, is to prevent wastage of water. But I am afraid that, if the proposed all-round metering is carried into effect, the quantity of money that would be wasted will far exceed the quan-

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tity of water that would otherwise be wasted. There are now more than 400 house-connections, and the cost of putting up meters for all these connections will come to about Rs. 25,000, the cost of putting up one meter being about Rs. 60. Besides this, it will also be necessary to keep a stock to provide for future demands, so that it will be necessary to spend, at the outset, something like rupees 35 and 40 thousand, if an all-round metering is to be carried into effect. Further, this amount is not to be spent within the country itself, but is to be remitted to the foreign merchant, and the question for the consideration of this House is whether there is any necessity or justification for making such an enormous tribute to the foreign merchant.

Is there such a wastage of water in private houses as to necessitate such a costly measure? The point for consideration, Sir, is only wastage in private houses. I don't say that there is no wastage in public hydrants. In public hydrants, there is real wastage, owing to lack of proper supervision, and if that wastage is stopped, it will be found that the average consumption of water per head is even below the quantity that is absolutely necessary. At present, even in spite of the wastage in public hydrants, the consumption of water per head is only 15 gallons per day. This is the lowest consumption on record in any part of the world. In other towns, it varies from 25 to 300 gallons a day. These figures are themselves sufficient answer to the charge of wastage. I can also speak from my experience in the town that there is generally speaking really no wastage in private houses. There might be a few stray cases of reckless use. But imposing a meter upon every body, for the recklessness of a few, is, Sir, a grossly unjust policy. The proper remedy in such a case is to compel the suspected individuals to put up meters for a temporary period on the hire-system. This is the proper remedy, and I understand that this was the remedy that was first proposed by the Government. I do not know why that was given up in favour of a costly and unjust system.

The figure that I have given, regarding the average consumption in the town, clearly shows that there is no wastage. I even believe that the Government

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advocate general metering, not because they are convinced that there is wastage, but because they have felt some difficulty to pump the quantity of water necessary to meet the demand. If this is the real reason, I submit, general metering will not decrease the demand; for the excess demand for the excess arises not from over consumption in private houses but from the use of water for industrial purposes. This House is aware that water is now supplied to the Railway Company, the Standard Oil Company and the Tata Oil Mills. The Tata Oil Mills are supplied water at the rate of 12 annas per 1,000 gallons, while the citizens of the town who pay water-tax, besides all sorts of Municipal taxes, have to pay Rs. 2 per 1,000 gallons. I cannot see any justification why these companies should be supplied at such a reduced rate, *especially when these companies have protested against their inclusion within the Municipality, and when these companies have been excluded from the jurisdiction of the Municipality*, even though under the new extension scheme the Municipality extends even beyond the limits of these companies.

Under these circumstances, if the Government have any difficulty to meet the demand, the proper thing to be done is, either to cut short the supply for industrial purposes, or to collect from them a higher price, so that, with the increased receipts, the efficiency of the pump may be improved.

Sir, if instead of proceeding on the lines that I have suggested, a general metering system is imposed upon the people, I submit, it will be a great injustice to the whole town. It will be an injustice, especially to the poor.

I believe, this House is aware, that the quantity of water that is allowed free of extra charge is proportionate to the rental value of the house. The calculation has no reference to the number of inmates who use water, so that the rich, who live in big houses, seldom exceed the prescribed maximum, while the poor who live in small cottages have necessarily to exceed it. It might be argued, perhaps, that the rich pay more in the shape of water-tax. But I submit that the price paid as water-tax is ridiculously lower than the price

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paid as extra charge, so that the poor, who have to pay a large proportion of the extra charge, will necessarily have to pay a higher rate upon the total consumption.

I, therefore, submit that the proposed scheme is an injustice to the whole town, and especially to the poor citizens, and that it is as unnecessary as it is costly.

I, therefore, support the resolution.

Dr. A. G. MENON (*Tattamangalam*).

Sir, I also support the resolution. We, the non-official members, coming from Mofussil parts, fully realise the difficulties of the people of Ernakulam, with regard to the question of water supply. From our limited experience here, during this Budget Session, we have been in a position to know how great a boon the people of this place have been blessed with, by the introduction of the pipe-water system. If the free supply of water, which is one of the prime necessaries of civilized existence—nay, of bare existence—is restricted by the metering system, I, for one, despair of the future sanitary condition of the town. Besides, it will primarily affect the poor and increase their sufferings. Hence I strongly support the resolution.

Mr. V. K. ARAVINDAKSHA MENON (*Chief Engineer*).

Sir, This resolution protesting against the installation of meters to private house-service-connections evidently seems to enjoy so much sympathy from our fellow-members that I, personally, am very unwilling to offer my protest against its being passed. I know I am thereby courting unpopularity among my friends, and a good deal of positive ill-feeling from the inhabitants of the Ernakulam Town in particular. Were I diplomatic enough to hide my sincere feeling and play on the side of popularity, I would be here standing now and proclaiming at the top of my voice my support of this resolution. How easy would my task have been! I would ask then: Is it proper for the Government to tax water and air? Are we not proud that the people of Cochin have clean habits, and is it then proper for the Government to resort to measures, which restrict the free use of water? And I could say a host of other things, playing on the sentiments and traditions of our people, swinging them to my side, and

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creating an impression among them that those who advocate the installation of meters are some detestable human beings, who take delight in harassing people unnecessarily, or who wish to gain some personal ends at the expense of their fellow brethern ?

Why should I make this stand—this unenviable position ? The answer is simple. I am engaged by you to run this Water-works on as economical lines as possible, consistent with efficiency, and I am specially pledged to zealously watch the interests of the general tax-payer and to bring to the timely notice of the Government, for their consideration, any point which affects their interests.

I have been intimately connected with this Water-works for the past four years, and I have had occasion to study each and every minute part of it, very very closely. While dealing with this question, I have to place myself in the role of an expert, dealing in figures, and to arrive at my conclusions, in much the same way as one does while working out a problem in Mathematics. I shall have to work up a solution that is definite. I shall have to aim at a single and only solution, much the same way as we say in Engineering that 2 and 2 make 4, and everything else is wrong. Of course, I do appreciate that such a heartless investigation of the matter can be scarcely considered to be proper, perhaps, when such complex quantities as human personalities and sentiments figure in our equation. I shall leave it to the House, therefore, to listen carefully to what I have to say and weigh them properly in your minds before committing yourselves to any final decision.

I shall now attempt to put forth before this House, in as clear a manner as possible, the situation we are in, in regard to our Water-works.

Ernakulam, of old, had not good water for her people, and many were the cries of her inhabitants, for a system of good water-supply for the town. Our Government, about 11 years ago, seriously took the matter up, and with characteristic promptness and efficiency set to work at the problem. This was at the time when His Highness Sir Sri Rama Varma, the

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Ex-Maharaja of Cochin, was ruling our land. As a result, we have today, in Ernakulam, good Alwaye water available, of a quality which any Water-works in the world would be proud to supply. This water is pumped from the Alwaye river, sedimented and filtered by a costly process, and projected into Ernakalam through a pipe line, 16 miles in length.

The idea was that it should be serviceable also to Mattancheri. This justified the Government to spend such a big amount on the system. Due to various engineering, and other, difficulties, it was not possible to transport this water across the pond till now. I am, however, hopeful that these difficulties will soon be cleared, and we shall be in a position to supply this water to Mattancheri also, at a very early date.

These Water-works were designed, by the late Mr. Mody, to supply 30,000 people, at the rate of 7½ gallons per day, working 12 hours at the Head Works, or in other words, the system is capable of supplying, at a maximum rate of 15 gallons per head per day, when the plant is run continuously, day and night. These works were designed, when the population at the time was only 20,000, and the Works were intended to last for 25 years. Now, it is only about 10 years, since the Works were started, and they have reached their limits. We are working day and night, continuously, all the 24 hours a day, during most of the three summer months.

Let us see, now, to how many people we are serving with this water. There are about 450 house-service-connections up-to-date, and it can be said, therefore, that we are supplying only about 4,500 people at their homes and the rest, of about 20,000 people, by means of street hydrants. Even now, many important streets in Ernakulam are not provided with Water-Mains, and it is only a small portion of the people from such localities that do take advantage of this precious gift. The position, now, is this. The Work, which was supposed to supply enough water in the homes of 30,000 people, is found inadequate to cope with the demand, long before its time; and even then, the major portion of the homes in the town, are not provided with service-connections.

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Mr. M. KRISHNA MENON (*Vyttila*).

Will the Hon'ble Member kindly explain, how is it that he attributes the excess to the house-connections alone, in the calculation made, in regard to the expenditure of water?

Mr. V. K. ARAVINDAKSHA MENON (*Chief Engineer*).

Yes, I will. Hydrants in 1094 were being used more than now, as the house-service-connections in the town have considerably increased, during the past five years. People who could get water at their homes, now, had to fetch it from the hydrants five years ago.

Dr. A. G. MENON (*Tattamangalam*).

But is water to be supplied to Railway Stations by the Government? It is difficult to believe that the Tatas and the Railways and other institutions do not use much water.

Mr. V. K. ARAVINDAKSHA MENON (*Chief Engineer.*)

In fact, all these companies put together do not consume more than 10,000 gallons of water a day, which needs only half an hour's pumping; so, that cannot cause this enormous increase from 6 to 24 hours. The number of pumping hours is not influenced by the consumption of water in the Tatas or the Railway Company to any great extent.

To continue my story. Having reached our limits, so far as the Water-works are concerned, while a major portion of the population is unattended to, the Government found itself placed in a very awkward situation. I began to enquire carefully why the system failed—a system which was designed to last for 25 years—before it had passed its tenth year. Careful calculations and observations were made, and the following interesting facts weredisclosed:—

Before the private house-connections were ever introduced, the machinery at the Head Works was never run for more than six hours per day, and it will be borne in mind that all the people, including those that now have water in their premises, had to go to these public hydrants for their supply of pure water. The public taps were, therefore, more in requisition, then, than were at any time. But, as house-service-

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connections began to increase, the pumping hours at the Head Works had to be extended more and more, until, at present, we are obliged to run the Plant, continuously, day and night, during summer. To give one an idea as to how these pumping hours have increased, in proportion to the increase in the number of house-connections, a few figures are given below. Only the month of Meenam is taken into consideration, because that is one of the months, when the Pumping Plant is called upon to work at its maximum capacity, and it is during such periods of the greatest demand that the chances of break-down or failure of supply are possible.

Year and month	Average number of pumping hours	Total number of house-connections at the end of the year	Number of public hydrants
Meenam			
1094	6 hours 20 minutes	15	87
1095	10 ,, 4 ,,	109	89
1096	12 ,, 45 ,,	221	92
1097	18 ,, 6 ,,	315	96
1098	20 ,, 45 ,,	390	96
1099	24 ,,	425	101
1100	23 ,,	434	101

From what I have said now, it is obvious that the service-connections are chiefly to be blamed for this excessive consumption of water. As I have already pointed out, no more than six hours were required, when all the public hydrants were at their maximum demand.

Mr M. K. RAMAN (*Ezhuva South*).

Will the Hon'ble Member please enlighten this House as to whether any request was made to measure the amount of water taken from the public hydrants?

Mr. V. K. ARAVINDAKSHA MENON (*Chief Engineer*),

Sir, There is yet another point which may be mentioned in this connection. If you observe the levels of water, in the elevated tank between the hours of six and ten a. m., you will notice that the tank is depleted by about 4 feet of level, in spite of the fact that the pumping goes on at the Head Works, uninterruptedly. One

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foot of level in the tank means 15,000 gallons of water. The maximum demand or what we call the peakload—

Mr. A. B. SALEM (*Jews*).

May I know that word, please?

Mr. V. K. ARAVINDAKSHA MENON (*Chief Engineer*).

p-e-a-k (peak). The maximum demand, or what we call the peakload, in the town, is about 35,000 gallons while the capacity of the pumping machinery is only 20,000 gallons per hour. There are, in all, about 101 public hydrants in the town, of which 60 are half-inch in size, and the remaining 41 are 3/4" in size. The pressure in the Ernakulam Town is about 37 feet, and the discharge from a half-inch tap is found to be 2 gallons per minute, and that from a $\frac{3}{4}$" tap $3\frac{1}{2}$ gallons. Let us take an extreme case in which all these public hydrants are opened simultaneously for one hour. The total discharge from the public hydrants for that one hour will be $(120+143\frac{1}{2}) \times 60 = 15,810$ gallons. To this should be added about 1,500 gallons, the average observed consumption by our two outside consumers, the Tata Oil Mills and the Railway Company. As the maximum consumption in the town is 35,000 gallons, it is clearly seen that the private service-connections are responsible for 17,690 during that hour; and this is all the more conspicuous, as the 15,810 gallons from public taps serve about 20,000 people, while the private services alone consume at least the same quantity for 4,500 people.

I have, now, made myself clear, Sir, that the cause of the failure of our system is attributable to the enormous waste that is going on unchecked in the homes of our Ernakulam people. I have clearly and unmistakably struck at the root of it. I had raised this question long ago, even when the number of pumping hours was about 16 to 18 hours a day. I had brought this to the notice of the Government several times. Experienced as our Government was, they at once saw the force of my arguments. The Government, however, consulted persons in charge of other Water-works. One of them was Mr. Sreenivasa Ayyangar of the Bangalore Water-works. He inspected the place, and found out very soon that the quantity of water pumped should have served a much more number

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of His Highness' subjects, and that the persons having service-connections were inordinately—without any idea of thrift—using much more water than is necessary.

Then, we invited the opinion of the Sanitary Engineer of the Madras Government. He informed us, in his letter, dated the 3rd of January 1923, that the Madras Government was urging upon the Municipal Councils in the Presidency the necessity of metering all house-service-connections, and meters are being insisted upon for all new house-connections.

Here, again, we have our experience emphatically endorsed by two of our friends, managing other important Water-works. Having satisfied itself that metering was the only remedy, the Government submitted for remarks the copy of my letter, advocating metering, to the Municipal Council, Ernakulam. Ever since, there were many public meetings, protesting against it, where many impassioned speeches of the type, I have already referred to, were made. Responsible officers, however, felt in their hearts the force of my arguments, and Mr. P. Krishna Menon, while President of the Municipal Council, Ernakulam, in his letter, dated the 13th of Makaram 1098, fully agreed to our proposal of metering all future house-service-connections.

Dr. A. G. MENON (*Tattamangalam*).

Was it the resolution of the Council ?

Mr. V. K. ARAVINDAKSHA MENON (*Chief Engineer*).

I do'nt, in fact, know whether it was the resolution of the Council. It was in his official capacity as Chairman that he wrote it, and it was on that account that we acted on it. Perhaps, it was his own opinion.

President.—It is not known whether it was the resolution of the Council.

Mr. V. K. ARAVINDAKSHA MENON (*Chief Engineer*).

But the inhabitants, having house-service-connections, did not, for evident personal reasons, like the introduction of meters on their house-connections. So long as they could get water in plenty, they did not care who did not get it. They did not want the Government to exercise any check on the free use of water

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for their kitchen gardens. They did not want to have any uneasiness in mind, when they took their morning dip in a 30 or 100 gallons plunge bath. Nor did they want to be disturbed by a meter, when they wished to sleep under a spray in summer.

Now, Sir, I hope the whole House will agree with me in thinking that the economical distribution of water is as important as an efficient supply. Not a single drop of water comes here of its own accord, and the Government spends a certain amount of money for every gallon of water that is available at the Ernakulam taps.

Mr. A. B. SALEM (*Jews*).

Sir, supposing the capacity of the Plant is increased, will it be possible to supply the whole town ?

Mr. V. K. ARAVINDAKSHA MENON (*Chief Engineer*).

Yes. We can double its present capacity. We cannot do anything more. It is not within practical limits to increase it any further. If we do not instal meters, it will be just possible, if the capacity is doubled, to supply water only to Ernakulam and not to Mattancheri.

It will, therefore, be realised that all efforts should be taken by the Government to prevent all waste. Now, the question of waste is viewed in different lights. The house-holder, who has paid his water-tax, feels perfect liberty to use or waste all the water that he or his household can, and yet considers that there has been no wastage going on his premises. He uses 80 to 100 gallons of water for bathing purposes alone, and in his opinion this cannot be called waste, because this water is used for cleaning his body. Another may use pipe-water for watering his gardens or sprinkling his lawns, and yet hold that there has been no wastage on his premises. In short, from the stand-point of the house-owner, there cannot be any wastage, so long as water is used for some specific purpose. But the department, whose duty it is to see that the water system goes on satisfactorily, views such exorbitant use from a different angle. When a householder uses more water than is allowed for in the design of the Works, it says that there is enormous

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wastage. In order to correct such wastage or exorbitant use, the meter seems to be the only remedy.

It was suggested in this House to-day that, instead of putting on meters to check wastage, a special staff may be appointed to watch and report to the P. W. D. or the Municipal authorities for necessary action any wastage, they might have noticed, going on in the houses. I might say that no useful purpose could be served, evidently, by posting a man or two for every group of houses. I seriously fear whether this proposal will not even shock the feelings of most of us, if we have to submit ourselves to being spied by others in the privacy of our houses.

Some say that the whole of the Water-works may be transferred to the Municipality. Whether the Municipality will be able to handle this is the question. I am certain that works costing 8 lakhs of rupees should not be brought under the control of our Municipalities who have no technically qualified men on their staff.

Mr. A. B. SALEM (*Jews*).

Can they not appoint one?

Mr. V. K. ARAVINDAKSHA MENON (*Chief Engineer*).

They have not at present one, and further, it will increase the cost unnecessarily.

Mr. A. B. SALEM (*Jews*).

They have not got work, and so they have not appointed one. (*Laughter.*)

Mr. V. K. ARAVINDAKSHA MENON (*Chief Engineer*).

There is another reason why the Municipality cannot work efficiently. As I told you at the outset, the idea originally was to give water both to Mattancheri and Ernakulam. There will be many difficulties arising when one Municipality has to deal with another which is independant and outside its limits.

Now, coming to the finances, in 1094 an expenditure of Rs. 13,000 was incurred for operating the system.

Mr. A. B. SALEM (*Jews*).

For what, please? I did not hear.

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Mr. V. K. ARAVINDAKSHA MENON (*Chief Engineer*).

For operating the system. This amount was to be collected from the Municipality. In 1095 it was Rs. 9,000, in 1096 Rs. 20,000, in 1097 Rs. 22,000, in 1098 Rs. 22,664. That means, at the end of 1098, the Municipality owed the Public Works Department, on account of the charges of water supply, an amount equal to Rs. 70,000. In all these cases there were adjustments, Government paying the Municipality the amount due for adjustment. Only Rs. 2,000 was given us by the Municipality from its own earnings. This shows the evident impossibility of the Municipality to meet the maintenance expenditure of the Works.

Mr. A. B. SALEM (*Jews*).

Was not the contribution given to the Municipality handed back to the Government ?

Mr. V. K. ARAVINDAKSHA MENON (*Chief Engineer*).

The Hon'ble Member means, I suppose, the contribution that the Government made to the Municipality, for taking over roads and other purposes.

Mr. A. B. SALEM (*Jews*).

The Hon'ble Member said, Government gave money and Government got back money. I am asking whether the money was the general contribution paid to the Municipality or a special contribution for water supply ?

President.—A special contribution, I think ?

Mr. V. K. ARAVINDAKSHA MENON (*Chief Engineer*).

Yes, Sir, a special contribution. That means, the Municipality was not able to find funds to finance or to run this, every year, so that the question of transferring this to the Municipality is not within practical possibilities.

Then, some people were speaking about the money, which might go outside the State for meters. We have to spend, altogether, Rs. 60—Rs. 45 for purchasing meters and Rs. 15 for supervising charges, &c. Rs. 24,000 will have to be spent for this purpose. Now, what will we gain by that ? If we do not instal meters, we have to double the capacity of the Plant,

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and for that an estimate has been prepared. The estimated cost comes to Rs. 1,90,000 primarily for extra machines, extra filters and such additions.

Dr. A. G. MENON (*Tattamangalam*).

To increase the capacity of the machine?

Mr. V. K. ARAVINDAKSHA MENON (*Chief Engineer*).

Yes, Sir, to increase the capacity of the Plant. We have to double it, and doubling is not without extra cost. That means, of course, we cannot double the capacity without additions. Unless you put in new machinery at the Head Works, it is impossible. So, what I am saying is that we have to invest about Rs. 2,00,000 on machinery alone, so that, even if people waste water, we still have the requisite quantity for supply.

President.—Are you closing? Time is up.

Mr. V. K. ARAVINDAKSHA MENON (*Chief Engineer*).

I have only got to say this much. I am standing on behalf of the people outside the Ernakulam Town. I am only just looking to the interest of the general tax-payer. If the wastage is checked, the two lakhs need not now be spent. We can check wastage only by the meter. Any Sanitary Engineer could tell you that. If this is not installed now, it will have to be installed later. There is no getting out of it. When the Harbour comes, there will be much more difficulty to introduce meters, due to *other influences*. And year by year you will find it more and more difficult to instal meters. Our rules originally contemplated the introduction of meters. But then, there were so many difficulties in getting meters, being war-time, and the cost of meters was also very high. Therefore, the Government then relaxed the provision for meters. Nobody took any action upon it for a long time, and here we are.

Mr. S. S. KODER (*Mattancheri*).

Sir, I want only some information. How will you be able to get the money required for installing meters?

Mr. V. K. ARAVINDAKSHA MENON (*Chief Engineer*).

From the house-owners; but we do not propose to impose the whole cost on the house-holder at once, but to get it in small instalments.

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I heard it also said in the House that the metering will not help the financial situation of the Water-works to any great extent. The point I wish to bring forth, Sir, is that I advocate meters, not with the purpose of making any direct income out of the sale of water to people. I repeat, it is primarily for checking the waste that is otherwise going on in the house-service-connections. If such a waste is checked, more houses can be supplied with the same quantity of water than is done at present. As I have told you before, we have reached the limits of our Works very prematurely, as we have extended our services only to 450 families, out of a possible of 2,000 homes, in Ernakulam.

There is an impression among the public that a considerable portion of water is utilised for industrial concerns, such as the Tatas and the Railway Company, and the inadequacy of the Pumping Plant to supply the town has been mainly attributed to this cause. As a matter of fact, both these concerns conjointly draw not more than 10,000 gallons of water per day; but every gallon of water they utilise is paid for. It is only a matter of half an hour's pumping in the Head Works per day, and so it may be seen that the proportion of water used by these firms to that consumed in the town is too small to be of any notice.

Further, there is another impression that a large amount of water is transported into Cochin and other places through the back-waters from the public hydrants on the fore-shore. Of these taps, which are only about seven in number, three or four are so placed, that water could be taken off them and transported by boats to other places. Even considering the extreme case that these four taps were continuously opened for 12 hours a day for this purpose, we find by calculation they cannot discharge more than 10,000 gallons, which represent only about 30 minutes of pumping at the Head Works. It may be seen that this quantity also is insignificant.

Now, it may be questioned; why cannot the supply be increased? I may mention here that it is possible, by spending about two lakhs of rupees more, to enhance the supply to double the present one. It is not economically possible to increase any more than that.

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The cost of maintenance, it may be pointed out here, will increase about three times the present expenditure, that is to say, while we are now spending Rs. 20,000 per year, on maintenance, we have to spend, if we double the supply, about Rs. 60,000 a year for running costs. Even in that case, if no check on wastage be exercised, I fear the capacity may not be sufficient even to meet the demands of Ernakulam, when service-connections are still extended to the remaining homes, while, if we check the waste by meters, we certainly shall be able to supply the whole of Ernakulam, including those houses now unmetered, with the present capacity of the Plant, thus saving the expenditure of two lakhs on additions. We shall be further saving about 40,000 rupees on maintenance also, every year. While there was a great clamour on the point that, when metres are installed, a sum of Rs. 24,000 to Rs. 30,000 will be going out of the State to foreign manufacturers, no one seems to mind that, if they are not installed and waste unchecked, Rs. 2,00,000 will leave the State coffers now, and a considerable additional amount every year, in the shape of running expenses.

But the proposals for enhancing the supply, I have already laid before the Government, for the following reasons:—Firstly, to save Ernakulam, at least for the present, at any cost, from a possible water famine, and secondly, if meters are installed for checking wastages, later on, if the people consent, the extra quantity of water available can be utilised in Mattancherry. In short, whether it is possible to supply Mattancherry with water or not depends entirely on this question.

A word or two more on some other wrong notions prevalent among the Hon'ble Members which I have noticed during the day. It is that the Ernakulam water-rate of 15 gallons per head per day cannot be considered too much as against 27 of Madras, 38 of Bombay and 40 of Calcutta, 200 of Chicago, etc. These figures, I have not checked, but they doubtless include water used for many other purposes than what the Ernakulam supply is intended to do. These are large quantities of water used for road watering every day, the enormous quantity used for sewage flushing purposes, and for other big industrial institutions, as work-

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shops, &c. In Chicago, in particular, there are no less than 600 busy factories in the city, the extensive pork-packing house of Messrs. Swift & Co., the Canning Factory of Messrs. Liby Macneil and Liby and the extensive cattle yards locally known as stock-yards, where they use, by the nature of the work, an enormous quantity of pipe-water. It may, therefore, be seen that the higher figures of water-rate seen in those cities are misleading, when they are compared with that of Ernakulam, where the water is intended to be used only for purely domestic purposes.

One thing more, and I have done. In protesting against this resolution, it is not my intention to inconvenience the public in any way, but the idea was only to see that the system goes on satisfactorily, and that the benefits of this wholesome water may be extended to Mattancheri, which surely needs it.

Dr. A. G. MENON (*Tattamangalam*).

Sir, may I know whether the meter was put to the public hydrants? Has the experiment ever been tried? The Hon'ble Member said that there are hundred and odd hydrants. May I know whether the meter was placed to find out whether the waste was there?

Mr. V. K. ARAVINDAKSHA MENON (*Chief Engineer*).

It is not necessary to meter hydrants. It is never done anywhere. As I told you first, in 1094 we had 87 public hydrants and only 15 house-service-connections, and in 1099, 101 hydrants and 650 house-service-connections. For increase in the pumping hours, hydrants are not to be blamed, as the number has not substantially increased during the time. The increase in the number of pumping hours, therefore, must directly be attributed to the increase in the house-service-connections.

Mr. N. PADMANABHA MENON (*Cranganur*).

Sir, I propose that the question may now be put.

Mr. C. ACHYUTA MENON (*Mulakunnattukavu*).

One word, Sir. Do I understand correctly, if the system is duplicated, Mattancherry can be supplied with water, provided metering is introduced in Ernakulam, and otherwise not?

Mr. V. K. ARAVINDAKSHA MENON (*Chief Engineer*).

Yes, Sir.

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Mr. EPHRAIM AMBOOKEN (*Adur*).

Before putting the resolution to vote, I would like to speak a few words on the subject. As far as the explanations given by the Official Member for D. P. W. go, that does not affect the question any way, Sir.

Mr. A. B. SALEM (*Jews*).

Sir, a point of order. If any member is able to speak in English, he ought to speak in English. But if any member is unable to speak in English, he can very well speak in Malayalam. Rule 24, Sir. May I ask the Hon'ble Member to offer an explanation for this?

President:— Are you, for the purpose of the of the debate, unable to speak in English?

Mr. EPHRAIM AMBOOKEN (*Adur*).

Sir, I am, at times able to speak in English, and at times, able to speak in Malayalam.

President.— Are you for the purpose of *this debate* unable to speak in English?

Mr. EPHRAIM AMBOOKEN (*Adur*).

I am able to speak in English, Sir.

President.— Please speak in English, then.

Mr. EPHRAIM AMBOOKEN (*Adur*)

Sir, first of all, I want to support this motion. It is because I hope that my information on the subject will have some weight, since I am a member from the Mofussil part of the State. From the explanations given by the Official Member, whatever he could convince the House was only that he can transport water from Ernakulam to Mattancherry. Now, I ask him why can't the Official Member charge the Mattancherry people for the additional expenditure which is incurred upon the question? At the same time, I don't understand why the Hon'ble Member could not propose to the Government to take the water to Adur. (*Laughter.*)

Mr. V. K. ARAVINDAKSHA MENON (*Chief Engineer*).

That is impossible and unnecessary. Adur could be supplied, if necessary, from other sources, more cheaply.

Mr. A. B. SALEM (*Jews*).

Sir, I beg to rise to a point of order. 25 (1) of Standing Orders.

President.—Please give the page number.

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Mr. A. B. SALEM (*Jews*).

Page 23 of the Manual, para 50 (1).

President.—The question has been fully discussed, and I hope there is no more necessity to continue the discussion. Anyhow, I will allow a few minutes, if members will cut short their speeches. You need not stop, Mr. Ambooken.

Mr. EPHRAIM AMBOOKEN (*Adur*).

I strongly support the motion.

Mr. MATHEW KOLADI VATAKKOT (*Kunnamkulam*).

Sir, May I know whether Government has got any objection to hand over this to the Municipalities concerned ?

President.—The Chief Engineer has already explained the position. I think that is enough. Any member wishing to speak?

Mr. T. A. RAMACHANDRA AYYAR *rose up*.

President.—You have got only five minutes.

Mr. T. A. RAMACHANDRA AYYAR (*Nellayi*).

Sir, I grudge to subscribe for the enjoyment of a few people. But since it is for alleviating the sufferings of that poor people, I support the resolution.

President.—Do you oppose or support the resolution ?

Mr. T. A. RAMACHANDRA AYYAR (*Nellayi*).

Sir, I support the motion, for charity's sake, than for anything else.

Mr. S. S. KODER (*Mattancherry*).

One word , Sir. If Mattancherry is not going to have water, without the meter system in Ernakulam, then, I strongly oppose the motion. (Before Mr. Koder sat down).

Mr. M. K. RAMAN (*Ezhuva South*).

Sir, I propose the question may now be put to the vote.

Mr. N. PADMANDBHA MENON (*Cranganur*).

Sir, I second it.

Mr. C. A. OUSEPH (*Chalakkudi*).

I rise to a point of order. The member has been given a right to speak and he has exercised it. It is an infringement of the right of reasonable debate to stop him in the course of his speech.

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Mr. M. K. RAMAN (*Ezhuva South*).

Then, I withdraw it.

President.—I think Mr. Koder has pushed his point. Have you anything more to say ? I may allow you a minute or too.

Mr. S S. KODER (*Mattancherry*).

No, Sir. I have done.

President.—Any one wishing to speak on the motion ?

The President read the resolution and put it to the House. It was carried by a large majority.

President.—We have reached the time for our sitting to-day. To-morrow being a public holiday, there will be no sitting, and the next day is Sunday. The sitting is, therefore, adjourned to Monday.

The Council rose at 5. p. m.

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